

**Amendments to the Drawings:**

The attached sheets of drawings include changes to Figs. 16-18B. These sheets, which include Figs. 16-18B, replace the original sheets including Figs. 16-18B. Figs. 16-18B have now been labeled as "PRIOR ART".

Attachment: Replacement Sheet

### **REMARKS/ARGUMENTS**

In the Office Action issued February 1, 2007, claims 1-3, 5-9, and 12-13 were rejected under 35 USC §102 as being anticipated by Nishimoto et al., US Patent Publication No. 2002/0089724 ("Nishimoto"). Claims 4 and 10-11 were rejected under 35 USC 103(a) as being unpatentable over Nishimoto. The drawings were objected to.

Claims 1 and 3-13 are pending in this application. Claims 1 and 7 have been amended to clarify the subject matter that the Applicant considers to be the invention. Claims 2 and 8 have been canceled. Claims 3, 4, 6, 9, and 13 have been amended to correct dependencies and to correct typographical errors.

The Applicant respectfully submits that claims 1, 3, 5-7, 9, and 12-13 are not anticipated by Nishimoto. Nishimoto discloses a dispersion compensating method for automatic compensation of waveform degradation caused by dispersion characteristics of an optical transmission path. Nishimoto discloses: a variable dispersion compensator for compensating for the dispersion of optical signal input via an optical transmission path; a bit error information monitoring circuit for generating bit error information of a received signal output from the variable dispersion compensator via an optical receiving circuit; and a controlling circuit for optimally controlling a wavelength dispersion value of the variable dispersion compensator based on the bit error information from the bit error information monitoring circuit. Thus, Nishimoto discloses a dispersion compensating method in which the compensation amount of the waveform degradation is feedback controlled based on the information concerning bit errors of the optical signal.

In particular, Nishimoto discloses that the wavelength dispersion value of the variable dispersion compensator at the minimum point is set as the optimum value, or the optimum value of the wavelength dispersion of the variable dispersion compensator is set at a center (averaged value) of the respective wavelength dispersion values of the variable dispersion compensator between two points where the measured bit error rate curve intersects a preset threshold of the bit error rate. (paragraph [0066])

By contrast, claim 1 requires that the amount of dispersion compensation in the variable compensator of dispersion is controlled to a center value in a range of the amount of dispersion compensation when the quality of transmission path becomes higher than a preset threshold as a value of initial setting in the variable compensator of dispersion, or a control for setting a minimum value when the quality of transmission path becomes lower than a preset threshold as a value of initial setting in the variable compensator of dispersion. Consequently, the amended claims are different from Nishimoto on selecting either of the controlling for setting the minimum value of the bit error rate, and the controlling for setting the center value in a range of lowest values based on the quality information.

Therefore, claim 1, and claim 7, which is similar to claim 1, as well as claims 3, 5-6, 9, and 12-13, which depend therefrom, are not anticipated by Nishimoto.

The applicant respectfully submits that claims 4 and 10-11 are not unpatentable over Nishimoto because even if Nishimoto were modified as suggested by the Examiner, the result would not be the present invention, as claimed. As discussed above, Nishimoto does not disclose or suggest that the amount of dispersion compensation in the variable

compensator of dispersion is controlled to a center value in a range of the amount of dispersion compensation when the quality of transmission path becomes higher than a preset threshold as a value of initial setting in the variable compensator of dispersion, or a control for setting a minimum value when the quality of transmission path becomes lower than a preset threshold as a value of initial setting in the variable compensator of dispersion, as is required by, for example, claim 1. The modification suggested by the Examiner does not cure the deficiencies of Nishimoto with respect to this requirement of claim 1.

Thus, even if Nishimoto were modified as suggested by the Examiner, the result still would not disclose or suggest all the features required by claim 1, or by claim 7, which is similar to claim 1.

Therefore, claim 4, which depends from claim 1, and claims 10-11, which depend from claim 7, are not unpatentable over Nishimoto as modified by the Examiner.

Each of the claims now pending in this application is believed to be in condition for allowance. Accordingly, favorable reconsideration of this case and early issuance of the Notice of Allowance are respectfully requested.

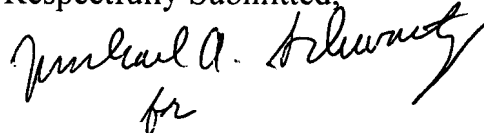
**Additional Fees:**

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with this application to Deposit Account No. 50-4047 (419546.0053).

**Conclusion**

In view of the foregoing, all of the Examiner's rejections to the claims are believed to be overcome. The Applicants respectfully request reconsideration and issuance of a Notice of Allowance for all the claims remaining in the application. Should the Examiner feel further communication would facilitate prosecution, he is urged to call the undersigned at the phone number provided below.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Edward A. Pennington", with a stylized flourish at the end.

for  
Edward A. Pennington  
Reg. No. 32,588

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